

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Spring 2018 Levee Inspection Results**

**Knights Landing Ridge Drainage District**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

\*\* Non-receipt of Summer or Winter Inspection  
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Spring 2018 Levee Inspection Results**

**Knights Landing Ridge Drainage District**

Waterway			Bank	Unit Miles
Unit No. 01 Knights Landing Ridge Cut			Right	6.36
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/13/2018 - 3/13/2018			
DWR Inspector	Zach Jojola			
Accompanied By	Gary Marler RD0108			

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojoia

LM Start		Rating **	A	Issue No.	<b>3</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_NA0008_01_s _ 2017_3				
Comment Code					
Inspector Comment					
District has levee O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	<b>8</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_NA0008_01_s _ 2013_8				
Comment Code					
Inspector Comment					
District maintains a stockpile of flood fight response material.					

No Photos

LM Start		Rating **	A	Issue No.	<b>9</b>
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_NA0008_01_s _ 2013_9				
Comment Code					
Inspector Comment					
District has written response plan and regular flood fight training.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.25	Rating **	A/W	Issue No.	32
LM End	0.25	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.722222 °	38.722222 °
				-121.666357 °	-121.666357 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:48010  
DS\_ID:19360  
EP\_NO: 9302  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments: Pipe has been grouted in place under permit 18987, 2015Pipe completely rusted through on LS slope of levee at toe/headwall of concrete distribution box. Pipe needs replacement or proper abandonment. Pipe not visible at outlet.  
FIELD\_STRUCT\_DESC: \*ABANDONED\* 36-inch corrugated metal drainage pipe through the levee, 27 feet below the crown. Slide gate on the waterside (WS) end. 12-foot by 6-foot concrete box on the landside (LS) end. (36-inch pipe [HLM 1.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9302, 1974 - Barbara Lowe Elliott; 36-inch pipe abandoned by removing ends and pumping pipe full of concrete under Permit No. 18987, 2016 - Knaggs Ranch, LLC, care of John Brennan). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 0+30)].  
FS Date: 5/16/2016 3:59:29 PM

LM Start	<b>0.25</b>	Rating **	A/W	Issue No.	<b>32 (cont)</b>
LM End	<b>0.25</b>	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP\_SP\_2018\_48010\_21582.jpg



Concrete distribution box on LS toe.

Photo 2 of 3 : UCIP\_SP\_2018\_48010\_21581.jpg



Slide gate on metal stand on WS toe. Pipe opening not visible.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.25	Rating **	A/W	Issue No.	32 (cont)
LM End	0.25	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.722222 °	38.722222 °
				-121.666357 °	-121.666357 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:48010 DS_ID:19360 EP_NO: 9302 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: Pipe has been grouted in place under permit 18987, 2015Pipe completely rusted through on LS slope of levee at toe/headwall of concrete distribution box. Pipe needs replacement or proper abandonment. Pipe not visible at outlet. FIELD_STRUCT_DESC: *ABANDONED* 36-inch corrugated metal drainage pipe through the levee, 27 feet below the crown. Slide gate on the waterside (WS) end. 12-foot by 6-foot concrete box on the landside (LS) end. (36-inch pipe [HLM 1.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9302, 1974 - Barbara Lowe Elliott; 36-inch pipe abandoned by removing ends and pumping pipe full of concrete under Permit No. 18987, 2016 - Knaggs Ranch, LLC, care of John Brennan). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 0+30)]. FS Date: 5/16/2016 3:59:29 PM					

Photo 3 of 3 : UCIP\_SP\_2018\_48010\_21580.jpg



Pipe failure at connection to concrete box on LS toe.

LM Start	0.41	Rating **	M	Issue No.	25
LM End	0.84	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.724209 °	38.727646 °
				-121.667919 °	-121.674378 °
DWR ID	DWR_NA0008_01_s_2018_25				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.41	Rating **	M	Issue No.	24
LM End	0.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.724209 °	38.727646 °
				-121.667919 °	-121.674379 °
DWR ID	DWR_NA0008_01_s_2018_24				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	0.87	Rating **	M	Issue No.	33
LM End	0.87	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.727869 °	38.727869 °
				-121.674875 °	-121.674875 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11064 DS_ID:19361 EP_NO: 9302 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe exposed on WS slope in trench may need to be backfilled to prevent erosion under pipe. FIELD_STRUCT_DESC: 20-inch steel irrigation pipe through the levee, 8.8 feet below the crown. Pump on a steel pile structure at the waterside (WS) toe. Siphon breaker in a 12-inch steel riser on the landside (LS) slope. Possible butterfly valve at the LS toe. (Permit No. 9302, 1974 - Barbara Lowe Elliott). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 32+94)]. FS Date: 4/5/2013					

Photo 1 of 3 : UCIP\_SP\_2018\_11064\_18426.jpg



Pump on pile at WS toe with pipe in open trench on LS slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.87	Rating **	M	Issue No.	33 (cont)	
LM End	0.87	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.727869 °		38.727869 °
				-121.674875 °		-121.674875 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11064						
DS_ID:19361						
EP_NO: 9302						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: Pipe exposed on WS slope in trench may need to be backfilled to prevent erosion under pipe.						
FIELD_STRUCT_DESC: 20-inch steel irrigation pipe through the levee, 8.8 feet below the crown. Pump on a steel pile structure at the waterside (WS) toe. Siphon breaker in a 12-inch steel riser on the landside (LS) slope. Possible butterfly valve at the LS toe. (Permit No. 9302, 1974 - Barbara Lowe Elliott). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 32+94)].						
FS Date: 4/5/2013						

LM Start	<b>0.87</b>	Rating **	M	Issue No.	<b>33 (cont)</b>
LM End	<b>0.87</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_SP\_2018\_11064\_18425.jpg



Siphon breaker in 12-inch steel riser on LS slope.

Photo 3 of 3 : UCIP\_SP\_2018\_11064\_18424.jpg



Possible butterfly valve off LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	1.13	Rating **	M	Issue No.	26
LM End	1.29	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.730134 °	38.731873 °
				-121.678820 °	-121.680739 °
DWR ID	DWR_NA0008_01_f_2017_26				
Comment Code					
FE : Fence					
Inspector Comment					
Barbed wire fence on landside slope.					

Photo 1 of 1 : SP\_2018\_NA0008\_256\_26\_20180306\_00008.jpg



View of fence on the landside slope. Fall 2017.

LM Start	1.15	Rating **	M	Issue No.	34
LM End	1.15	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.730275 °	38.730275 °
				-121.678975 °	-121.678975 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11065 DS_ID:19362 EP_NO: 9305 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Slope on WS shoulder appears to be eroding at pipes exit from levee. 36-inch conc riser on LS is filled with mud. FIELD_STRUCT_DESC: 10-inch steel irrigation pipe through the levee, 5.8 feet below the crown. Pump at the waterside (WS) toe. 36-inch concrete standpipe at the landside (LS) toe. (Permit No. 9305, 1974 - Albert L. Bacchini). 5-inch steel pipe sleeved through the 10-inch pipe. Annular space grouted. (Permit No. 6076, 1968 - Albert L. Bacchini). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 47+00) (11-inch pipe listed)]. FS Date: 4/5/2013					

Photo 1 of 3 : UCIP\_SP\_2018\_11065\_18429.jpg



Pump on WS shoulder overgrown and may be abandoned.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	1.15	Rating **	M	Issue No.	34 (cont)	
LM End	1.15	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.730275 °		38.730275 °
				-121.678975 °		-121.678975 °
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11065 DS_ID:19362 EP_NO: 9305 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Slope on WS shoulder appears to be eroding at pipes exit from levee. 36-inch conc riser on LS is filled with mud. FIELD_STRUCT_DESC: 10-inch steel irrigation pipe through the levee, 5.8 feet below the crown. Pump at the waterside (WS) toe. 36-inch concrete standpipe at the landside (LS) toe. (Permit No. 9305, 1974 - Albert L. Bacchini). 5-inch steel pipe sleeved through the 10-inch pipe. Annular space grouted. (Permit No. 6076, 1968 - Albert L. Bacchini). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 47+00) (11-inch pipe listed)]. FS Date: 4/5/2013						

LM Start	<b>1.15</b>	Rating **	M	Issue No.	<b>34 (cont)</b>
LM End	<b>1.15</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_SP\_2018\_11065\_18428.jpg



Erosion at pipes exit from levee on WS shoulder.

Photo 3 of 3 : UCIP\_SP\_2018\_11065\_18427.jpg



36-inch Concrete standpipe at LS toe

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.04	Rating **	M	Issue No.	23
LM End	2.47	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.740631 °	38.745733 °
				-121.688820 °	-121.693487 °
DWR ID	DWR_NA0008_01_s_2018_23				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	2.58	Rating **	M	Issue No.	36
LM End	2.58	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.747110 °	38.747110 °
				-121.694415 °	-121.694415 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11067					
DS_ID:19364					
EP_NO: 9307					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: Siphon breaker on LS burried or broken off and missing.					
FIELD_STRUCT_DESC: 1 of 2: 14-inch steel drainage pipe through the levee, 5.4 feet below the crown. Pump house on a pile structure at the landside (LS) toe. Siphon breaker on the LS slope. Service pole and anchor at the LS toe. (14-inch pipe [HLM 2.62] authorized under Automatic Board Order (ABO) issued as Permit No. 9307, 1974 - Azalene E. Lowe; a 12-foot section of an existing 14-inch pipe on LS replaced and name change under Permit No. 9307-1, 2016 - Ann Grube). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 123+25)].					
FS Date: 4/5/2013					

Photo 1 of 1 : UCIP\_SP\_2018\_11067\_18431.jpg



Pump and pipe on LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.67	Rating **	A/W	Issue No.	39 (cont)
LM End	2.67	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748404 °	38.748404 °
				-121.694818 °	-121.694818 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:16106  
DS\_ID:19392  
EP\_NO: 9301  
Repair Type: No Action Needed  
Crossing Status: Found  
UCIP Comments:  
FIELD\_STRUCT\_DESC: 2 of 2: 24-inch steel drainage pipe through the levee, 7.3 feet below the crown. Pump house mounted on concrete box in irrigation ditch at the landside (LS) toe. Siphon breaker in riser on the waterside (WS) slope. (one 24-inch and one 18-inch pipes [HLM 2.7] authorized under Automatic Board Order (ABO) issued as Permit No. 9301, 1974 - Reclamation District No. 730). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 128+00)].  
FS Date: 4/5/2013

LM Start	<b>2.67</b>	Rating **	A/W	Issue No.	<b>39 (cont)</b>
LM End	<b>2.67</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP\_SP\_2018\_16106\_27212.jpg



Siphon breaker on WS slope

Photo 3 of 3 : UCIP\_SP\_2018\_16106\_27214.jpg



Pipe on WS slope.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.68	Rating **	M	Issue No.	40
LM End	2.68	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.748524 °	38.748524 °
				-121.694788 °	-121.694788 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41892 DS_ID:19383 EP_NO: 13164 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to contact owner to determine status of crossing and install markers if appropriate. FIELD_STRUCT_DESC: 4-inch coated steel natural gas collection pipe through the levee, 2.8 feet below the crown. Pipe attached to the downstream side of the bridge. (Permit No. 13164, 1981 - Shell Oil Company). Design drawings available in permit. FS Date: 4/5/2013					

No Photos

LM Start	2.70	Rating **	M	Issue No.	18
LM End	2.70	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.748837 °	38.748837 °
				-121.694823 °	-121.694823 °
DWR ID	DWR_NA0008_01_f_ 2015_18				
Comment Code					
DE : Debris					
Inspector Comment					
Portion of the pipe seems to be replaced and the abandoned pipe is left at the toe of the landward side of the levee.					

Photo 1 of 2 : SP\_2018\_NA0008\_256\_18\_20180306\_00003.jpg



The dark portion on the left pipe seems to have been replaced with a new pipe. Fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.70	Rating **	M	Issue No.	18 (cont)	
LM End	2.70	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Encroachments			38.748837 °	38.748837 °	
				-121.694823 °	-121.694823 °	
DWR ID	DWR_NA0008_01_f_2015_18					
Comment Code						
DE : Debris						
Inspector Comment						
Portion of the pipe seems to be replaced and the abandoned pipe is left at the toe of the landward side of the levee.						

Photo 2 of 2 : SP\_2018\_NA0008\_256\_18\_20180306\_00004.jpg



View of the abandoned pipe at the toe of levee on the landward side.  
Fall 2015.

LM Start	2.70	Rating **	A/W	Issue No.	41
LM End	2.70	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748909 °	38.748909 °
				-121.694811 °	-121.694811 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11244 DS_ID:19394 EP_NO: 8752 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 1 of 2: 30-inch asphalt coated steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder. Pump on a steel pile structure at the landside (LS) toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available in permit. [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013					

Photo 1 of 2 : UCIP\_SP\_2018\_11244\_18603.jpg



Pump on steel pile structure at LS toe with pipe on slope.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.70	Rating **	A/W	Issue No.	41 (cont)	
LM End	2.70	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.748909 °	38.748909 °	
				-121.694811 °	-121.694811 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11244 DS_ID:19394 EP_NO: 8752 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 1 of 2: 30-inch asphalt coated steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder. Pump on a steel pile structure at the landside (LS) toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available in permit. [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013						

Photo 2 of 2 : UCIP\_SP\_2018\_11244\_18602.jpg



Siphon breaker on pipe at WS slope.

LM Start	2.71	Rating **	A/W	Issue No.	42
LM End	2.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748929 °	38.748929 °
				-121.694749 °	-121.694749 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11247 DS_ID:19395 EP_NO: 8752 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 2 of 2: 24-inch steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder with a pump on a steel pile structure at the landside (LS) toe. Butterfly shutoff valve at the LS toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available. [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013					

Photo 1 of 2 : UCIP\_SP\_2018\_11247\_18605.jpg



Pump on steel pile structure with butterfly valve and pipe on LS slope.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.71	Rating **	A/W	Issue No.	42 (cont)
LM End	2.71	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.748929 °	38.748929 °
				-121.694749 °	-121.694749 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11247					
DS_ID:19395					
EP_NO: 8752					
Repair Type: No Action Needed					
Crossing Status: Found					
UCIP Comments:					
FIELD_STRUCT_DESC: 2 of 2: 24-inch steel drainage pipe through the levee, 3 feet below the crown. Siphon breaker on pipe on the waterside (WS) shoulder with a pump on a steel pile structure at the landside (LS) toe. Butterfly shutoff valve at the LS toe. (Permit No. 8752, 1973 - Reclamation District No. 730). Some design drawings available. [Additional Reference(s): DWR Levee Log, 1990].					
FS Date: 4/5/2013					

Photo 2 of 2 : UCIP\_SP\_2018\_11247\_18604.jpg



Siphon breaker on pipe at WS shoulder.

LM Start	3.36	Rating **	M	Issue No.	2
LM End	3.44	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.758432 °	38.759332 °
				-121.695158 °	-121.696063 °
DWR ID	DWR_NA0008_01_s_2016_2				
Comment Code					
Inspector Comment					
2011 - Toe scour and bank slumping. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-5_R]					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	3.50	Rating **	U	Issue No.	20
LM End	3.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.759910 °	38.759910 °
				-121.696920 °	-121.696920 °
DWR ID	DWR_NA0008_01_f_2015_20				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

LM Start	<b>3.50</b>	Rating **	U	Issue No.	<b>20 (cont)</b>
LM End	<b>3.50</b>	Issue Type +	Ma	Location *	WS

Photo 1 of 3 : SP\_2018\_NA0008\_256\_20\_20180313\_00045.jpg



Updated view of erosion on the waterside slope. Spring 2018.

Photo 2 of 3 : SP\_2018\_NA0008\_256\_20\_20180306\_00006.jpg



View of the erosion on the waterward side of the levee looking upstream. Fall 2015.

LM Start	<b>3.50</b>	Rating **	U	Issue No.	<b>20 (cont)</b>
LM End	<b>3.50</b>	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP\_2018\_NA0008\_256\_20\_20180306\_00005.jpg



Deep erosion at the bottom of the waterside slope 3-4 foot cut. Fall 2013

* Location LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	3.78	Rating **	M	Issue No.	30
LM End	3.78	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.762886 °	38.762886 °
				-121.700406 °	-121.700406 °
DWR ID	DWR_NA0008_01_s_2017_30				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Hole is at the toe of the levee on the waterward side.					

Photo 1 of 1 : SP\_2018\_NA0008\_256\_30\_20180306\_00011.jpg



View of the erosion at the toe of the levee on the waterward side. Spring 2016.

LM Start	3.86	Rating **	M	Issue No.	31
LM End	3.86	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.763751 °	38.763751 °
				-121.701398 °	-121.701398 °
DWR ID	DWR_NA0008_01_s_2018_31				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion at the toe of the levee. LMA is monitoring erosion with stakes.					

Photo 1 of 1 : SP\_2018\_NA0008\_256\_31\_20180306\_00012.jpg



View of the erosion at the toe of the levee on the waterward side. Spring 2016.

LM Start	3.88	Rating **	M	Issue No.	1
LM End	3.95	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.764037 °	38.764905 °
				-121.701434 °	-121.702074 °
DWR ID	DWR_NA0008_01_f_2017_1				
Comment Code					
Inspector Comment					
2011 - Toe erosion and erosion pockets from tree popouts. More tree popouts are expected due to the eroding toe. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-9_R]					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	4.38	Rating **	M	Issue No.	22
LM End	4.88	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.771003 °	38.777404 °
				-121.703413 °	-121.707412 °
DWR ID	DWR_NA0008_01_f_2015_22				
Comment Code					
DT : Ditch					
Inspector Comment					
Ditch is at the levee toe on the landward side.					

Photo 1 of 1 : SP\_2018\_NA0008\_256\_22\_20180306\_00007.jpg

View of the ditch on the landward side of the levee looking upstream.  
Fall 2015.

LM Start	4.89	Rating **	M	Issue No.	43
LM End	4.89	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.777566 °	38.777566 °
				-121.707591 °	-121.707591 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11264 DS_ID:19367 EP_NO: 4443 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe does not have adequate cover at crown. FIELD_STRUCT_DESC: 16-inch steel drainage pipe through the levee, 0.5 feet below the crown. Pad constructed over pipe for vehicular crossing. Pump on metal structure on the landside (LS). Flap gate on the waterside (WS) end. Siphon breaker on the pipe on the WS. Slide gate on the LS toe. (Permit No. 4443, 1963 - Reclamation District No. 730). Design drawings available in permit. [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013					

Photo 1 of 3 : UCIP\_SP\_2018\_11264\_18622.jpg



Pump and pipe on LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	4.89	Rating **	M	Issue No.	43 (cont)	
LM End	4.89	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.777566 °	38.777566 °	
				-121.707591 °	-121.707591 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11264 DS_ID:19367 EP_NO: 4443 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe does not have adequate cover at crown. FIELD_STRUCT_DESC: 16-inch steel drainage pipe through the levee, 0.5 feet below the crown. Pad constructed over pipe for vehicular crossing. Pump on metal structure on the landside (LS). Flap gate on the waterside (WS) end. Siphon breaker on the pipe on the WS. Slide gate on the LS toe. (Permit No. 4443, 1963 - Reclamation District No. 730). Design drawings available in permit. [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013						

LM Start	<b>4.89</b>	Rating **	M	Issue No.	<b>43 (cont)</b>
LM End	<b>4.89</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_SP\_2018\_11264\_18621.jpg



Siphon and air vent on WS shoulder.

Photo 3 of 3 : UCIP\_SP\_2018\_11264\_18620.jpg



Pump on Steel pile structure with slide gate at LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	6.00	Rating **	M	Issue No.	44
LM End	6.00	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.788921 °	38.788921 °
				-121.721985 °	-121.721985 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41068 DS_ID:19397 EP_NO: 5276 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears abandoned at this time. FIELD_STRUCT_DESC: 2 of 2: 20-inch steel irrigation pipe through the levee, 4.9 feet below the crown. Vertical pump unit on pile structure in stream. Siphon breaker on the landside (LS) shoulder in a 16-inch steel riser. Flap gate on the LS end. Pipe discharges into an irrigation ditch on the LS. Steel plate welded over end of pipe at pump structure. (Replaced an existing 18-inch pipe at this location under Permit No. 5276, 1966 - Reclamation District No. 730). [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013					

LM Start	<b>6.00</b>	Rating **	M	Issue No.	<b>44 (cont)</b>
LM End	<b>6.00</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_SP\_2018\_41068\_18643.jpg



Pump on steel structure at WS toe.

Photo 2 of 3 : UCIP\_SP\_2018\_41068\_18642.jpg



Steel plate welded over pipe end at pump platform.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	6.00	Rating **	M	Issue No.	44 (cont)	
LM End	6.00	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.788921 °	38.788921 °	
				-121.721985 °	-121.721985 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:41068 DS_ID:19397 EP_NO: 5276 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears abandoned at this time. FIELD_STRUCT_DESC: 2 of 2: 20-inch steel irrigation pipe through the levee, 4.9 feet below the crown. Vertical pump unit on pile structure in stream. Siphon breaker on the landside (LS) shoulder in a 16-inch steel riser. Flap gate on the LS end. Pipe discharges into an irrigation ditch on the LS. Steel plate welded over end of pipe at pump structure. (Replaced an existing 18-inch pipe at this location under Permit No. 5276, 1966 - Reclamation District No. 730). [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/5/2013						

Photo 3 of 3 : UCIP\_SP\_2018\_41068\_18641.jpg



Siphon breaker buried inside 16-inch steel riser on LS shoulder.

LM Start	6.06	Rating **	M	Issue No.	7
LM End	6.34	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.789529 °	38.792433 °
				-121.722814 °	-121.726463 °
DWR ID	DWR_NA0008_01_s_2012_7				
Comment Code					
EQ : Equipment					
Inspector Comment					
Equipment and fence are on the landside slope of the levee.					

Photo 1 of 2 : SP\_2018\_NA0008\_256\_7\_20180306\_00001.jpg



View of the equipment on the landward side of the levee looking upstream. Fall 2015.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Knights Landing Ridge Cut	Right	6.36	03/13/2018 03/13/2018	Zach Jojola

LM Start	6.06	Rating **	M	Issue No.	7 (cont)	
LM End	6.34	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.789529 °		38.792433 °
				-121.722814 °		-121.726463 °
DWR ID	DWR_NA0008_01_s_2012_7					
Comment Code						
EQ : Equipment						
Inspector Comment						
Equipment and fence are on the landside slope of the levee.						

Photo 2 of 2 : SP\_2018\_NA0008\_256\_7\_20180306\_00002.jpg



A current view of the equipment on the levee slope. Spring 2014

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable  N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Spring 2018 Levee Inspection Results**

**Knights Landing Ridge Drainage District**

Waterway			Bank	Unit Miles
Unit No. 02 Knights Landing Ridge Cut			Left	6.03
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/13/2018 - 3/13/2018			
DWR Inspector	Zach Jojola			
Accompanied By	Gary Marler RD0108			

**Summer & Winter Inspections**

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

*The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.*

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.97	Rating **	M	Issue No.	21
LM End	1.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.732967 °	38.743596 °
				-121.679196 °	-121.689011 °
DWR ID	DWR_NA0008_02_s_2018_21				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP\_2018\_NA0008\_257\_21\_20180313\_00023.jpg



View of vegetation on the landside slope. Spring 2018.

LM Start	0.97	Rating **	M	Issue No.	23
LM End	1.88	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.732967 °	38.743596 °
				-121.679196 °	-121.689011 °
DWR ID	DWR_NA0008_02_s_2018_23				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.99	Rating **	M	Issue No.	24
LM End	0.99	Issue Type +	En	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.733120 °	38.733120 °
				-121.679383 °	-121.679383 °
DWR ID					

**Comment Code**

**Inspector Comment**

FS\_ID:52536  
DS\_ID:19370  
EP\_NO: 9320  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 09/27/2017 Received updated information from DWR levee inspector, Zachary Jojola, confirming that this crossing is still abandoned. Recommend pipe be abandoned properly according to Title 23 requirements. Updated photos have been added to this report. (DWR UCIP - O. Magana)04/09/2013 Appears abandoned as pump is missing from platform. (DWR UCIP - W. Wylie)  
FIELD\_STRUCT\_DESC: 16-inch steel irrigation pipe through the levee, 2.8 feet below the crown. Pipe discharges into a 36-inch concrete standpipe at the levee toe. Pump on steel pile structure in stream with metal walkway. Two service poles on the waterside (WS) slope. (Automatic Board Order (ABO) issued as Permit No. 9320, 1974 - Ralph W. Pollock). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 52+00) (15-inch pipe listed)].  
FS Date: 11/29/2017 12:46:36 PM

LM Start	<b>0.99</b>	Rating **	M	Issue No.	<b>24 (cont)</b>
LM End	<b>0.99</b>	Issue Type +	En	Location *	

Photo 1 of 3 : UCIP\_SP\_2018\_52536\_18708.jpg



Pipe at 36-inch Concrete standpipe on LS toe.

Photo 2 of 3 : UCIP\_SP\_2018\_52536\_18707.jpg



Pump platform and walkway on WS toe.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	0.99	Rating **	M	Issue No.	24 (cont)	
LM End	0.99	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.733120 °	38.733120 °	
				-121.679383 °	-121.679383 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:52536 DS_ID:19370 EP_NO: 9320 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 09/27/2017 Received updated information from DWR levee inspector, Zachary Jojola, confirming that this crossing is still abandoned. Recommend pipe be abandoned properly according to Title 23 requirements. Updated photos have been added to this report. (DWR UCIP - O. Magana)04/09/2013 Appears abandoned as pump is missing from platform. (DWR UCIP - W. Wylie) FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 2.8 feet below the crown. Pipe discharges into a 36-inch concrete standpipe at the levee toe. Pump on steel pile structure in stream with metal walkway. Two service poles on the waterside (WS) slope. (Automatic Board Order (ABO) issued as Permit No. 9320, 1974 - Ralph W. Pollock). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 52+00) (15-inch pipe listed)]. FS Date: 11/29/2017 12:46:36 PM						

Photo 3 of 3 : UCIP\_SP\_2018\_52536\_77500.jpg



WS view: pipe and electrical panel visible.

LM Start	1.34	Rating **	M	Issue No.	22
LM End	1.54	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.737214 °	38.739591 °
				-121.683159 °	-121.685327 °
DWR ID	DWR_NA0008_02_f_2016_22				
Comment Code					
DT : Ditch					
Inspector Comment					
Ditch within 10 feef from levee toe on LS.					

Photo 1 of 1 : SP\_2018\_NA0008\_257\_22\_20180306\_00007.jpg



View of a ditch near landside toe. Fall 2016.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	<b>2.26</b>	Rating **	M	Issue No.	<b>25</b>
LM End	<b>2.26</b>	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.748282 °	38.748282 °	
			-121.692652 °	-121.692652 °	
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11304 DS_ID:19388 EP_NO: 15517 Repair Type: Non-Urgent Crossing Status: Indicator Found UCIP Comments: Pipe alignment should be marked at levee crossing. FIELD_STRUCT_DESC: 8-inch steel natural gas pipeline through the levee, 50 feet below the crown. (Permit No. 15517, 1991 - Chevron U.S.A., Inc.). Design drawings available in permit. FS Date: 4/9/2013					

No Photos

LM Start	<b>2.28</b>	Rating **	U	Issue No.	<b>26</b>
LM End	<b>2.28</b>	Issue Type +	En	Location *	
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.748505 °	38.748505 °	
			-121.692697 °	-121.692697 °	
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:50106 DS_ID:19386 EP_NO: 13164 Repair Type: Urgent Crossing Status: Indicator Found UCIP Comments: 09/01/2016 - Markers present on the edges of Road 16. Alignment indicated by markers shows parallel alignment to the levee. Permit indicates pipe crosses levee and therefore should have markers indicating where it crosses the levee. (T. Hatch/UCIP)04/08/2013 - Need to have pipe located and marked properly if still in use. (W. Wylie/UCIP) FIELD_STRUCT_DESC: 4-inch steel natural gas collection pipe through the levee, 3.2 feet below the crown. Permit indicates that the pipe was installed on the northern shoulder of Road 16 and crosses the Knights Landing Ridge Cut on the northern side of the Road 16 bridge. (Permit No. 13164, 1981 - Shell Oil Company). FS Date: 9/1/2016					

Photo 1 of 3 : UCIP\_SP\_2018\_50106\_18700.jpg



Sign on LS shoulder may indicate location of pipe, or it may indicate where pipe crosses approach ramp to bridge.

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.28	Rating **	U	Issue No.	26 (cont)	
LM End	2.28	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.748505 °	38.748505 °	
				-121.692697 °	-121.692697 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:50106 DS_ID:19386 EP_NO: 13164 Repair Type: Urgent Crossing Status: Indicator Found UCIP Comments: 09/01/2016 - Markers present on the edges of Road 16. Alignment indicated by markers shows parallel alignment to the levee. Permit indicates pipe crosses levee and therefore should have markers indicating where it crosses the levee. (T. Hatch/UCIP)04/08/2013 - Need to have pipe located and marked properly if still in use. (W. Wylie/UCIP) FIELD_STRUCT_DESC: 4-inch steel natural gas collection pipe through the levee, 3.2 feet below the crown. Permit indicates that the pipe was installed on the northern shoulder of Road 16 and crosses the Knights Landing Ridge Cut on the northern side of the Road 16 bridge. (Permit No. 13164, 1981 - Shell Oil Company). FS Date: 9/1/2016						

LM Start	<b>2.28</b>	Rating **	U	Issue No.	<b>26 (cont)</b>
LM End	<b>2.28</b>	Issue Type +	En	Location *	

Photo 2 of 3 : UCIP\_SP\_2018\_50106\_75964.jpg



View from the levee crown looking toward the LS of the levee. gas line marker signs are visible marking an alignment parallel to the levee.

Photo 3 of 3 : UCIP\_SP\_2018\_50106\_75965.jpg



View of the marker signs information

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.32	Rating **	M	Issue No.	20
LM End	2.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.749099 °	38.756799 °
				-121.692831 °	-121.692638 °
DWR ID	DWR_NA0008_02_s _ 2018_20				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	2.72	Rating **	M	Issue No.	2
LM End	2.93	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.754899 °	38.757925 °
				-121.692653 °	-121.693048 °
DWR ID	DWR_NA0008_02_s _ 2016_2				
Comment Code					
Inspector Comment					
2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011 - Multiple scallops throughout the site and slumping of the toe. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-0_L]					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	2.98	Rating **	M	Issue No.	5
LM End	3.11	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.758587 °	38.760053 °
				-121.693359 °	-121.694686 °
DWR ID	DWR_NA0008_02_s _ 2016_5				
Comment Code					
Inspector Comment					
2006 - The whole levee toe area is slowly slumping into the channel (creep) due to dewatering and poor slope soils. Occasional piping in the levee slope evident as well. Pistol-butted trees at the levee toe indicate slow retreat. 2011 - Slumping of the levee toe. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-1_L]					

No Photos

LM Start	3.60	Rating **	M	Issue No.	3
LM End	3.73	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.765522 °	38.767336 °
				-121.700608 °	-121.701023 °
DWR ID	DWR_NA0008_02_s _ 2016_3				
Comment Code					
Inspector Comment					
2011 - The toe has eroded away and there are a few scallops from bank slumping. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_3-7_L]					

No Photos

LM Start	3.63	Rating **	M	Issue No.	16
LM End	4.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.765878 °	38.774476 °
				-121.700688 °	-121.702854 °
DWR ID	DWR_NA0008_02_s _ 2018_16				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	3.93	Rating **	A/W	Issue No.	27 (cont)	
LM End	3.93	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP LMA Responsibility			38.770317 °	38.770317 °	
				-121.701281 °	-121.701281 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11293 DS_ID:19374 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 1 of 2: 16-inch steel discharge pipe through the levee, 3 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS). Service pole at the pump house. (16-inch pipe [HLM 3.97] authorized under Automatic Board Order (ABO) issued as Permit No. 9317, 1974 - Reclamation District No. 819). [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 211+05) (15-inch pipe listed)]. FS Date: 4/9/2013						

Photo 3 of 3 : UCIP\_SP\_2018\_11293\_18673.jpg



16-inch pipe with siphon breaker on WS shoulder.

LM Start	3.94	Rating **	A/W	Issue No.	28
LM End	3.94	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			38.770335 °	38.770335 °
				-121.701286 °	-121.701286 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:11291 DS_ID:19401 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 2 of 2: 24-inch steel discharge pipe through the levee, 9 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS) with a butterfly shutoff valve. Service pole at the pump house. (Permit No. 9317, 1974 - Reclamation District No. 819). Pipe replaced in 2012. [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 210+99)]. FS Date: 4/9/2013					

Photo 1 of 3 : UCIP\_SP\_2018\_11291\_18669.jpg



Pumphouse at LS toe.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	3.94	Rating **	A/W	Issue No.	28 (cont)	
LM End	3.94	Issue Type +	Ma	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP LMA Responsibility			38.770335 °	38.770335 °	
				-121.701286 °	-121.701286 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11291 DS_ID:19401 EP_NO: 9317 Repair Type: No Action Needed Crossing Status: Found UCIP Comments: FIELD_STRUCT_DESC: 2 of 2: 24-inch steel discharge pipe through the levee, 9 feet below the crown. Pump house on pile structure in drainage ditch on the landside (LS). Siphon breaker on the pipe on the waterside (WS) with a butterfly shutoff valve. Service pole at the pump house. (Permit No. 9317, 1974 - Reclamation District No. 819). Pipe replaced in 2012. [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual 127, June 1953, (Station 210+99)]. FS Date: 4/9/2013						

Photo 2 of 3 : UCIP\_SP\_2018\_11291\_18668.jpg



Pipe in grass on WS shoulder.

LM Start	<b>3.94</b>	Rating **	A/W	Issue No.	<b>28 (cont)</b>
LM End	<b>3.94</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP\_SP\_2018\_11291\_18667.jpg



Siphon breaker and butterfly valve on WS shoulder.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	4.12	Rating **	M	Issue No.	17
LM End	4.23	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.772966 °	38.774477 °
				-121.702129 °	-121.702854 °
DWR ID	DWR_NA0008_02_s _ 2018_17				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	4.30	Rating **	M	Issue No.	4
LM End	4.55	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.775271 °	38.778115 °
				-121.703685 °	-121.706195 °
DWR ID	DWR_NA0008_02_s _ 2016_4				
Comment Code					
Inspector Comment					
2011 - This site is the downstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_4-7_L]					

No Photos

LM Start	4.53	Rating **	A/W	Issue No.	15
LM End	4.56	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.778120 °	38.778437 °
				-121.705754 °	-121.706050 °
DWR ID	DWR_NA0008_02_s _ 2018_15				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
150' long and 1" wide crack that has swelled up from the rain. RD 108 has the crack flagged and continues to monitor.					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	



**Flood Control Project Maintenance  
Levee Inspections**

## Levee Inspection Report By Mile - Spring 2018

### Knights Landing Ridge Drainage District

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	4.84	Rating **	M	Issue No.	14
LM End	5.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.781372 °	38.783151 °
				-121.709710 °	-121.711998 °
DWR ID	DWR_NA0008_02_s _ 2018_14				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	5.34	Rating **	C	Issue No.	13
LM End	5.34	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.786504 °	38.786504 °
				-121.716261 °	-121.716261 °
DWR ID	DWR_NA0008_02_f _ 2017_13				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

LM Start	5.36	Rating **	M	Issue No.	6
LM End	5.93	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.786566 °	38.792395 °
				-121.716724 °	-121.724091 °
DWR ID	DWR_NA0008_02_s _ 2016_6				
Comment Code					
Inspector Comment					
2011 - This site is the upstream section of the old KLR 5.3L site. Levee toe is slowly retreating. Cracking on top of the levee may indicate potential mass movement. 2015: Site is part of the extended inventory, last inspected 2011. [2015 Site ID: KLR_5-8_L]					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

# Knights Landing Ridge Drainage District

Missing siphon breaker on LS slope.

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	5.55	Rating **	M	Issue No.	29 (cont)	
LM End	5.55	Issue Type +	En	Location *		
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			38.788662 °	38.788662 °	
				-121.718997 °	-121.718997 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:11289 DS_ID:19375 EP_NO: 3671 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Electrical panal missing parts. Siphon breaker missing from pipe on LS. Pipe heavily corroded at outlet with holes present. Appears abandoned-should be abandoned properly. FIELD_STRUCT_DESC: 20-inch coated steel irrigation pipe through the levee, 5.5 feet below the crown. Siphon breaker in a steel pipe riser on the landside (LS) slope. Metal cutoff wall. Service pole on the waterside (WS) slope. (Replaced 20-inch pipe at same location in 1961 under Permit No. 3671, 1961 - Mary Anna Richardson). [Additional Reference(s): DWR Levee Log, 1990]. FS Date: 4/9/2013						

Photo 3 of 3 : UCIP\_SP\_2018\_11289\_18663.jpg



Concrete headwall and distribution box at outlet on LS toe. Pipe heavily corroded.

LM Start	5.72	Rating **	C	Issue No.	19
LM End	5.72	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.790385 °	38.790385 °
				-121.721131 °	-121.721131 °
DWR ID	DWR_NA0008_02_f_2015_19				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	5.79	Rating **	M	Issue No.	18
LM End	5.79	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.791169 °	38.791169 °
				-121.722147 °	-121.722147 °
DWR ID	DWR_NA0008_02_f_2015_18				
Comment Code					
DT : Ditch					
Inspector Comment					
Ditch dug on the landside slope of the levee to prevent vehicle access.					

Photo 1 of 3 : SP\_2018\_NA0008\_257\_18\_20180306\_00004.jpg



Perspective view of the ditch on the landward slope of the levee looking downstream. Fall 2015.

LM Start	<b>5.79</b>	Rating **	M	Issue No.	<b>18 (cont)</b>
LM End	<b>5.79</b>	Issue Type +	En	Location *	LS

Photo 2 of 3 : SP\_2018\_NA0008\_257\_18\_20180306\_00005.jpg



The ditch is dug onto the landward slope of the levee. Fall 2015.

LM Start	<b>5.79</b>	Rating **	M	Issue No.	<b>18 (cont)</b>
LM End	<b>5.79</b>	Issue Type +	En	Location *	LS

Photo 3 of 3 : SP\_2018\_NA0008\_257\_18\_20180306\_00006.jpg



View of the ditch on the landward slope of the levee. Spring 2016.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Spring 2018**

**Knights Landing Ridge Drainage District**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Knights Landing Ridge Cut	Left	6.03	03/13/2018 03/13/2018	Zach Jojola

LM Start	5.94	Rating **	M	Issue No.	1
LM End	5.94	Issue Type +	En	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.792735 °	38.792735 °
				-121.724092 °	-121.724092 °
DWR ID	DWR_NA0008_02_s_2012_1				
Comment Code					
FE : Fence					
Inspector Comment					
Fence blocks access to NW part of the levee. Strawberries are being grown on the waterside slope and beehives are on the crown.					

LM Start	<b>5.94</b>	Rating **	M	Issue No.	<b>1 (cont)</b>
LM End	<b>5.94</b>	Issue Type +	En	Location *	CR

Photo 1 of 2 : SP\_2018\_NA0008\_257\_1\_20180306\_00001.jpg



View of the fence on the crown. Fall 2017.

Photo 2 of 2 : SP\_2018\_NA0008\_257\_1\_20180306\_00002.jpg



View of the fence on the crown of the levee looking upstream. Spring 2018.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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